

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-22 are all the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

Claims 1 and 11 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over DiFazio (U.S. Patent Application Publication No 2003/0063576) in view of Scott et al. (U.S. Patent No. 6,154,486, hereafter “Scott”). Claims 1, 2, 8, 11, 12, 16, 17, and 20 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio. Claims 4, 5, 14, and 15 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio and further in view of Karlsson et al. (U.S. Patent Application Publication No. 2002/0057730, hereafter “Karlsson”). Claims 10 and 22 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio and further in view of Bhatooolaul (U.S. Patent Application Publication No. 2001/0046864, hereafter “Bhatooolaul”). Claims 3, 6, 7, 9, 13, 18, 19 and 21 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully traverses the prior art rejections.

In the previous Amendment filed on May 6, 2008, Applicant submitted that there is no teaching or suggestion in DiFazio that a detection magnitude is evaluated based on estimated channel parameters and a correlation between the signal received at the receiver and a predetermined digital sequence, where the detection signal is compared with an adaptive threshold to decide if a signal burst is detected.

In response, the Examiner merely regurgitates the rejection verbatim and simply adds:

In response to applicants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.1986).²

The Examiner's reliance on *In re Keller*, 208 U.S.P.Q. 871 (CCPA 1981) is not understood. First, this case stands for the proposition that a digital circuit taught by a secondary reference can be combined with a primary reference teaching an equivalent analog circuit. The court held that non-obviousness could not be shown by attacking one of the references because it did not teach the digital circuit for an identical device.

The motivation for combining references can always be questioned. For example, a reference is not available under 35 U.S.C. § 103 if it is not within the field of the inventors endeavor and was not directly pertinent to the particular problem with which the inventor was involved. See *King Instrument Corp. v. Otari Corp.*, 226 U.S.P.Q. 402 (Fed. Cir. 1985). Moreover, references cannot properly be combined with each other when such would result in destroying that on which the invention of one of the references is based. *Ex parte Hartmann*, 186 U.S.P.Q. 366, 367 (Pat. Off. Bd. App. and Inter. 1974).

Applicant respectfully submits that a *prima facie* case of obviousness under 35 U.S.C. § 103 has not been established by the Examiner, because the Examiner has not provided any objective reasoning how one of ordinary skill in the art would have been able to modify DiFazio

² Page 2 of the Office Action dated July 11, 2008.

in view of Scott (if indeed the references could be combined) to produce the claimed invention since the cited references do not teach key features of the claimed invention.

Further, as Applicant previously submitted, Scott has little or no relevance to the present invention. Scott teaches a detection method for repeated codeword preamble codes by partitioning the repeated codeword preamble code into its constituent subcodes and detecting a correlation peak with respect to each constituent subcode (column 37, lines 28-48). Scott further teaches detecting four correlation peaks in test signal locations, each of which is connected to its own threshold comparator 1387 and each of which is also connected to a threshold signal 1397 output from a threshold setting circuit 1383. When the signal value at a test signal location 1387 exceeds the threshold signal level, the respective comparator 1384 changes state.

Nowhere does Scott teach or suggest comparing an adaptive threshold to a detection signal to decide if a signal burst is detected.

Further, in the previous Amendment, Applicant submitted that DiFazio does not teach or suggest that the detection magnitude is evaluated based on estimated channel parameters and a correlation between a signal received at a receiver and a predetermined digital sequence.

In response, the Examiner asserts:

Examiner asserts that DiFazio in Figs. 2 and 3 clearly shows that burst detector 10 receives information from channel estimation device 7, and therefore it shows that a detection magnitude is evaluated on the basis of estimated channel parameters. Furthermore, DiFazio shows that a detection magnitude (see Fig. 3, output of block 13) is evaluated based on the correlation (see block 12, wherein matched filter has been interpreted as correlator) between a received signal (r_1 , r_2 ,

...) and a predetermined digital sequence (see the channel estimation sequence (h_i , h_2, \dots) at the input of matched filter 12).³

Applicant respectfully disagrees with the Examiner's position and submits that the Examiner's position is severely flawed for at least the following reasons.

The Examiner appears to read the claimed channel parameters on the channel input response from the channel estimation device 7 (page 3 of the Office Action). The Examiner also appear to read the claimed predetermined digital sequence on the channel estimation sequence (page 4 of the Office Action). Accordingly, the Examiner reads both the claimed estimation channel parameters and the claimed predetermined digital sequence on the channel input response from the channel estimation device 7. The Examiner's position therefore cannot be valid, since the claimed "predetermined digital sequence" is not an estimated parameter, but a sequence of a specific number of samples having a specific length to ensure detection under favorable conditions. The claimed estimated channel parameters and the claimed predetermined digital sequence are clearly different factors, thus undermining the rationale for the Examiner's stated rejection.

Further, Applicant again respectfully submits that the Scott/DiFazio combination suffers from the same deficiencies as the DiFazio/Scott combination, for reasons that need not be set out in any detail beyond that already mentioned above. Applicant therefore respectfully requests the Examiner to withdraw this rejection as well, with respect to the independent claims and also their respective dependent claims.

³ Pages 3-4 of the Office Action.

Still further, Karlsson and Bhatooolaul clearly do not cure the deficiencies of DiFazio and Scott. Even all four references together would not meet the express requirements of claims 1 and 11.

Accordingly, Applicant respectfully submits that independent claims 1 and 11 should be allowable because the cited reference do not teach or suggest all of the features of the claims. Claims 2-10 and 12-22 should also be allowable at least by virtue of their dependency on independent claims 1 and 11.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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